

NEWSLETTER

of the

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UNIVERSITY OF HAWAII
HONOLULU 14, HAWAII



GEORGE CAMPBELL MUNRO, 1866 - 1963

Charles H. Lamoureux^{1/}

With the death of George Campbell Munro on December 4, 1963, Hawaii lost a pioneer ornithologist and botanist, an inveterate collector of its plants and animals, and its most dedicated conservationist.

George Munro was born in Clevedon, New Zealand on May 10, 1866. His grandparents were Highland Scots who had migrated to New Zealand via Nova Scotia and Australia in the early nineteenth century. He inherited a goodly measure of Scotch tenacity and a pioneering spirit which were to serve him well throughout his long life.

While he had no formal scientific training, his interest in natural history developed early. When still in his early teens he learned the techniques of collecting and preparing birds for scientific study. As a youth he made an extensive collection of New Zealand insects. His collections included 43 species of beetles new to science which were described and named by Thomas Broun in his "Manual of New Zealand Coleoptera" published in 1893.

Mr. Munro first came to Hawaii in 1890 to join the Rothschild expedition to collect Hawaiian birds. From 1890 to 1892 he traveled throughout the Hawaiian chain in search of birds. The specimens were sent to Rothschild's famous Tring Collection in England, and are now housed at the American Museum of Natural History.

In 1892 he returned to New Zealand, was married, and then immediately came back to Hawaii where he became overseer on the Gay and Robinson Ranch at Makaweli, Kauai. During his travels around the ranch he collected plants and animals, and recorded his observations in the journals which he kept regularly for many years. Mr. Munro left Gay and Robinson in 1899 to become manager of the Molokai Ranch. Before he left Molokai in 1906 he had converted the ranch from a rundown and undeveloped condition to a well-run, profitable operation. It was during this time that he began many experiments in practical ecology and conservation for which he was to gain fame in later years. Among other accomplishments, he also started the honeybee industry on Molokai.

From 1906 to 1911 he returned to New Zealand where he was engaged in farming. He returned to Hawaii for good in 1911, when he became manager of the Lanai Company's cattle ranch. George Munro's efforts on Lanai, from 1911 to 1934 are well-known, and have been reported many times in the past (for example, see F. R. Fosberg, "Plant Collecting on Lanai, 1935", Mid-Pacific Magazine, Apr.-Jun. 1936:119-123). His experiments leading to the development of effective wind-breaks, the planting of Araucarias to utilize fog drip in increasing the island's water supply, and the recovery of large parts of the native forest under his expert care and management need no further comment here. The principles of soil and water conservation he developed on Lanai could well be applied in many other parts of the world.

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UNIVERSITY OF HAWAII
BOTANICAL GARDEN

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During the years when he was involved in ranching he nevertheless found time to devote to studying and collecting the flora and fauna. When he retired from business in 1934 he was able to devote full time to the study of natural history. For two years in cooperation with the Bishop Museum, H.S.P.A., the Board of Agriculture and Forestry, and Hui Manu, he made a survey of the birds of the major Hawaiian islands, comparing his observations with those he had made more than 40 years earlier. From 1937 to 1941 he initiated and developed a banding project on sea birds of the Hawaiian and Central Pacific Islands in cooperation with the U. S. Biological Survey. In 1944 he published "Birds of Hawaii", the standard work on Hawaiian land and sea birds. He revised and published the second edition of this book in 1960, when he was 94 years of age. During World War II he contributed to the war effort by mounting a number of sea birds to be used in aviation survival training courses. At this time he was elected a member of the American Ornithologists' Union, limited to two hundred outstanding North American ornithologists.

For many years Mr. Munro had been interested in plants, and was concerned about the destruction of native Hawaiian forests. His experiences on Molokai and Lanai had made him particularly interested in the dry-land plants. About 1950 he began his campaign for a dry-land area where these plants could be grown and preserved. With permission from the National Guard he began planting an area on the slopes of Diamond Head. He obtained seeds from friends throughout the islands -- Erythrina, Sida, Lipochaeta, Hibiscus brackenridgei, and many others. As the seeds began to germinate, he made careful observations on the growth and establishment of the seedlings. He noted that although dry-land plants are able to survive in extremely dry areas, the seeds normally germinate during the rainy season and the seedlings become established at this time. When the rainy season at Diamond Head was not wet enough to enable the seedlings to become established, Mr. Munro and his family carried buckets of water up the steep slopes to supplement the natural supply. Most of the planting was done in a nine-acre area on the lower slopes of the north-west side of Diamond Head. Throughout the area native dry-land plants were set out, and the area became known as Na La'au Hawaii (Plants belonging to Hawaii). Special care was devoted to a two-acre section at the back of Na La'au Hawaii. In this smaller area only endemic Hawaiian species were planted and as these plants succeeded introduced species were eliminated. This area was called Ke Kua'aina (the back land).

Realizing that Na La'au Hawaii and Ke Kua'aina would have to have some sort of official designation as a permanent sanctuary, Mr. Munro began a campaign to have the area set aside by the territorial government as a dry-land garden for native plants. The campaign was long and difficult, and involved his writing countless letters to government officials, individuals, and newspapers. Success was achieved in 1958 when Governor Quinn designated nine acres on the slopes of Diamond Head as Na La'au Hawaii Arboretum. With statehood, custody of this land was transferred to the Division of State Parks, and recently an additional parcel of land, of over 100 acres has been added to the arboretum. In 1961 another dream was realized when the State Parks Division installed a pump and water pipes in the area. Thus, it is no longer necessary to carry water by hand to young seedlings.

The Garden Club of Honolulu became interested in Mr. Munro's project and during the past few years has donated more than five thousand dollars which have been used in planting and maintaining part of the area, and in constructing a lookout center with benches, a drinking fountain, and a memorial plaque at the entrance to Na La'au Hawaii. The Garden Club has indicated that it will continue to support the project, and it is hoped that other groups and individuals will join in to ensure that the development of the dry-land garden in Na La'au Hawaii will not be forgotten.

Mr. Munro's extensive collections of plants and animals were deposited, for the most part, in the B. P. Bishop Museum where they were available to all scientists. Many species new to science were represented in these collections, and have been described by several workers. Among the plants named in his honor are Canavalia lanaiensis var. munroi, Cayanea munroi, Cyrtandra munroi, Euphorbia munroi, Haplostachys munroi, Hedyotis mannii var. munroi, Labordia molokaiana var. munroi, Pelea munroi, Pritchardia munroi, Railliardia scabra var. munroi, and Tetraplasandra munroi. An araliaceous plant, first discovered by Munro near Makaweli, Kauai, in the early 1890's, and known to the

Hawaiians as "Pokalakala", proved to be an undescribed genus which Dr. E. E. Sherff named Munroidendron. This tree was later discovered in the Nonou Mountains of Kauai by Forbes, although the type locality at Makaweli is now a cane field. For several years plants of Munroidendron were not collected, and it was presumed extinct, but in 1961 Tadayuki Kato rediscovered it in the Nonou Mountains. Specimens were collected and seeds sent to Mr. Munro who succeeded in growing seedlings at Ke Kua'aina. In 1963 an additional locality was discovered in Hoolulu Valley on the Na Pali Coast of Kauai. This very striking plant is a fitting memorial to George Munro.

In later years many honors came to him. He was a charter member and an honorary life member of the Hawaii Audubon Society. In 1960 he received an honorary membership in the Hawaiian Botanical Gardens Foundation and was elected to honorary life membership in the Hawaiian Botanical Society. In the same year he was made an honorary associate in ornithology by the Bernice P. Bishop Museum. In 1961 he was awarded the Medal of Honor by the Garden Club of America, this organization's highest award, for his work in conservation. In 1962 the Garden Club of Honolulu dedicated a bronze plaque in his honor. In 1963 he received the first Conservation Award of the Conservation Council for Hawaii.

Mr. Munro was a prolific writer. In addition to his major work, "Birds of Hawaii", he published many articles on Hawaiian and Pacific birds. For instance, since 1939 he published about 175 articles and notes on ornithology in the journal of the Hawaii Audubon Society, ELEPAIO. A list of his botanical publications is appended to this paper.

George Munro remained active until the end of his life. His last two botanical publications appeared in the December 1963 issue of ELEPAIO which was not published until after his death. His mind was keen and his memory excellent the last time I talked with him, about two months ago. Whenever he heard that I would be collecting in an interesting area he would send me copies of notes he had made in the area several years before, along with requests for seeds. In 1961, when I visited Laysan, he sent me copies of his notes and we talked at length about the observations he had made there 70 years before. It was obvious that he remembered the details as clearly as if he had been there within the year. He continued to climb Diamond Head to Ke Kua'aina twice a week until his 96th birthday, and was most distressed when, on doctor's orders, his hiking was curtailed. Even when he could no longer bend over to plant seeds, he would still make a hole in the ground, drop in a seed, replace the earth with his foot, and continue eagerly on the next site that looked good for planting. On these trips he was accompanied by his wife, Jesse, and other members of his family who would assist in planting, weeding, and watering.

It was an unforgettable experience to see George Munro, when nearly 96 years old, walking slowly up the trail to Ke Kua'aina, using two canes to help his balance, then suddenly spotting an interesting plant, leaning on one cane and gesturing with the other, while he told the source of the seed, when it was planted, when it germinated, how well it survived the last drought, when he first found the species, its past distribution, and its present abundance. This is the way I will remember George Campbell Munro.

BOTANICAL PUBLICATIONS OF GEORGE CAMPBELL MUNRO:

- 1920. A new Cyanea from Lanai, Hawaii. B. P. Bishop Mus., Occ. Pap. 7:43, pl. 12.
(with C. N. Forbes)
- 1929. Windbreaks for eroded lands. Hawn. For. & Agr. 26:117-124.
- 1929. Norfolk Island pine for the wet forests. Hawn. For. & Agr. 26:126-127.
- 1933. Preserving the rare plants of Hawaii. Hawaiian Acad. Sci., Proc. 8th Ann. Meet., Spec. Pub. B. P. Bishop Mus. 21:26-27.
- 1948. Hawaiian endemic flowering plants suitable for culture in gardens. Elepaio 9: 14-15; 16-18; 23-25.
- 1949. Some seeding plants detrimental to birds. Elepaio 9:50-51.
- 1950. New Zealand teatree. Elepaio 11:14.
- 1951. Leahi native garden. Elepaio 11:37-38; 12:9-11.
- 1952. Revisiting the island of Lanai in 1952. Elepaio 12:62-64.

1952. Attempts to save the shoreside and dryland plants of Hawaii. Elepaio 13:1-5.
 1952. Na Laau Hawaii. Elepaio 13:39-43.
 1953. Waahila Hawaiian garden. Elepaio 13:72-74.
 1953. Na Laau Hawaii. Elepaio 14:3-6.
 1953. Suggestion for arboretum adjoining Na Laau Hawaii. Elepaio 14:24-26.
 1954. Na Laau Hawaii, (Plants belonging to Hawaii). Elepaio 14:63-65; 15:3-5.
 1954. Dry-land plants in a dry season. Elepaio 14:69-70.
 1954. Na Laau Hawaii in 1954. Elepaio 15:30.
 1955. Preserving the rare plants of Hawaii. Elepaio 15:57-58.
 1955. Na Laau Hawaii, (Plants belonging to Hawaii). Elepaio 16:1-2.
 1957. Fog drip on Lanai watershed. Elepaio 17:49-51.
 1957. Na Laau Hawaii at the crossroads. Elepaio 18:29-30.
 1958. Na Laau Hawaii in the last two years. Elepaio 18:81.
 1958. Growth patterns of some native plants at Na Laau Hawaii in 1958. Elepaio 19:18-19.
 1959. Ke Kua'aina from October 1, 1958 to September 30, 1959. Elepaio 20:39-41.
 1960. Ke Kua'aina from October 1, 1959 to September 30, 1960. Elepaio 21:34-36.
 1960. History of tree form of Hibiscus brackenridgii. Elepaio 21:2.
 1961. Ke Kua'aina from October 1, 1960 to March 31, 1961. Elepaio 21:78-79.
 1962. Ke Kua'aina from April 1, 1961 to November 30, 1961. Elepaio 22:62-63.
 1962. Plants endemic to Hawaii now growing at Ke Kua'aina. Elepaio 22:89-92.
 1963. The forests of Molokai. Elepaio 24:29-30.
 1963. The Lanai fogdrip experiment. Elepaio 24:30.

A N N U A L R E P O R T O F T H E S E C R E T A R Y F O R 1 9 6 3 *

Nine regular meetings were held during the year 1963. As usual, there were no regular meetings held during the three summer months of July, August and September.

During the summer, however, two successful botanical forays were conducted. One, in July, was along the Kaena shoreline, to observe and study seashore and dry-land flora; the other, in August, was in the Palihua area, in a native rain-forest area. On this latter trip, a magnificent stand of Sequoia planted by Mr. Thomas McGuire in 1928 was also visited. About thirty persons took part in each of the forays. Both excursions were under the leadership of Mr. McGuire.

Scientific programs consisted of the following addresses:

January: Dr. Charles Lamoureux, 1962 Retiring Society President, Dept. of Botany, University of Hawaii, "The natural history of Midway Atoll."

February: Mr. W. W. G. Moir, President, Hawaiian Botanical Gardens Foundation, Inc., "A botanical trip through western Australia, Mauritius, Reunion, Madagascar and Kenya."

March: Dr. S. G. Stephens, Visiting Professor of Genetics, University of Hawaii (North Carolina State College), "Geographical distribution of New World cottons."

April: Dr. Harry Clements, Dept. of Plant Physiology, University of Hawaii, and C. Brewer & Co., "Soil infertility."

May: Dr. Lindsey Olive, Visiting Professor of Botany, University of Hawaii, (from Columbia University), "Genetics of the fungi Sodaria fimicola."

June: Dr. Charles Rick, Carnegie Professor of Horticulture, University of Hawaii (from the University of California at Davis), "Botanizing in the Galapagos Islands."

October: Dr. Ernest G. Holt, retired biologist, conservationist and naturalist, "Cactus country."

November: Dr. Donald P. Watson, Visiting Professor of Horticulture, University of Hawaii (from Michigan State University), "Plants are for people."

December: Dr. Maxwell S. Doty, Dept. of Botany, University of Hawaii, Presidential address: "Opportunities for botanical research in Hawaii."

ANNUAL REPORT OF THE SECRETARY FOR 1963

The following persons were made honorary members of the Society:

Mr. L. W. Bryan	Mr. Thomas McGuire
Dr. Walter Carter	Miss Marie Neal
Dr. Otto Degener	Dr. Charles Poole
Dr. Constance Hartt	

Several amendments to the Constitution and By-laws of the Society were adopted; Dr. E. J. Britten, Parliamentarian, was responsible for drawing these up properly. These changes have to do with such matters as when dues are to be declared in arrears, the purposes of the Society, the Society year, and the duties of the Auditor.

The Society was represented at several public hearings having to do with conservation measures.

The Society gave two wish awards of \$15.00 and \$10.00 to the winners of the botanical exhibits in the Senior and Intermediate Divisions, respectively, at the Hawaiian Science Fair.

The Annual Hawaiian Botanical Society Prize was awarded to two senior students at the University of Hawaii: Miss Marily Galang and Mr. Richard Kuramoto.

The Society went on record as supporting the efforts of the Hawaiian Botanical Gardens Foundation to establish a national tropical botanical garden.

Floral and plant exhibits were presented at all of the meetings by members.

The annual meeting was followed by a social hour, at which refreshments were served.

REPORT OF THE TREASURERFOR THE YEAR ENDED NOVEMBER 30, 1963

Cash in Bank:

Commercial Account	\$ 65.14	
First Federal Savings & Loan	<u>1,106.76</u>	\$1,171.90

Receipts:

Dues	452.00	
Gift	10.00	
Interest on Savings & Loan Acct.	<u>52.38</u>	514.38
		<u>\$1,686.28</u>

Expenditures:

Secretary's expenses, mailing notices, news letters, etc.	\$366.24	
Treasurer's expenses, mailing bills, etc.	80.80	
Nature Conservancy 1963 dues	10.00	
Hawaiian Botanical Garden Foundation 1963 dues	25.00	
Conservation Council for Hawaii 1963 dues	2.00	
Friends of Foster Gardens 1963 dues	25.00	
Hawaiian Botanical Gardens Foundation Contributing Gift	10.00	
Cigars for Okura	<u>5.48</u>	
	77.48	
		524.52
		<u>\$1,161.76</u>

(continued on page 136)

REPORT OF THE TREASURER FOR THE YEAR ENDED
NOVEMBER 30, 1963 (continued from page 135)

Cash in Bank 11/30/63

Commercial Account

\$ 35.64

First Federal Savings & Loan

1,126.12\$1,161.76

1/17/63 Transfer from Savings to Com. Acct.

(33.02)

Dues outstanding

8

Science Fair Prizes still outstanding.

M E M B E R S (As of December 3, 1963)

Akamine, Ernest	Coleman, Dr. Robert	Haas, Dr. Theodor P.
*Alexander, Dr. Robert E.	Cooil, Dr. Bruce J.	Hamilton, Dr. Richard A.
Anderson, Donald	*Cooperrider, Dr. Tom S.	Hannagan, Herbert
Anderson, Dr. Earl J.	*Cowan, Dr. R. S.	Hanson, Dr. Noel
Aono, Mrs. Laura	*Cranwell, Dr. Lucy M.	Haramoto, Frank
Apo, Melvin	Cushing, Dr. Robert L.	Hartt, Dr. C. E.
Aragaki, Dr. Minoru	Davidson, Eugene H.	Hastrup, Herman
Auchter, Mrs. E. C.	Davis, Clifton J.	Hayashi, Toshiichi
Babcock, Mrs. J. D.	Degener, Dr. Otto	Heinz, Dr. Don J.
Baker, Dr. Gladys E.	Denison, Harry L.	*Hill, Peter J. R.
Baker, Ray Jerome	*Diaz-Piferrer, Dr. M.	Holt, Mr. & Mrs. Ernest G.
Baldwin, Mrs. Helen S.	Doi, Asao	Holtzmann, Dr. O. V.
*Barrau, Dr. Jacques F.	Doi, Mitsugi	Hoshino, Mrs. Mitsuharu
Baver, Dr. Leonard D.	Doty, Dr. Maxwell S.	*Hosmer, Prof. Ralph S.
Beardsley, John W., Jr.	Dull, Dr. Gerald G.	Hu, Benjamin K. S.
Beaumont, Mrs. J. H. (Thelma B.)	Ekern, Dr. Paul	Ishii, Dr. Mamoru
Bell, Jack A.	Erwin, Miss Ada B.	Jackson, F.
Bernatowicz, Dr. Albert J.	Fine, Jules	Johannessen, Dr. George A.
Brash, Dr. & Mrs. Adrian	Flateau, Betty	Jones, Thomas S.
Brewbaker, Dr. James Lynn	*Fogg, George G.	Kamemoto, Dr. H.
Britten, Dr. E. J.	Forbes, Miss Ada	Kato, Tadayuki
Brodie, Hugh	Force, Dr. Roland W.	Kawano, Yoshihiko
Bryan, E. H., Jr.	*Fosberg, Dr. F. R.	Keller, Mrs. L.
*Burr, Dr. George	*Fox, Herschell	Kimura, Nagato
Bush, W. M.	Fox, Patrick D.	Kirsch, Mr. & Mrs. Oscar
*Carlquist, Dr. Sherwin	Fraker, Robert E.	Klemmer, Dr. Howard W.
Carter, Dr. Walter	Freitas, Mrs. J. B.	Koike, Dr. Hideo
Chi, Richard	Fukuda, Miss Mitsuno	Kosaki, Kazuo
Chock, Alvin K.	Fukumura, George M.	*Krajina, Dr. Vladimir J.
Choi, Wilbert	Galang, Miss Marilyn	Krauss, Miss Beatrice
Christian, S. C.	Gilbert, James C.	Krauss, Noel L. H.
Chun, Amos K. L.	Gillett, Dr. George W.	Kuck, Loraine E.
Chun, Wallace K. C.	Goto, Dr. Shosuke	Kuramoto, Richard
Claflin, Mansfield	Gowing, Dr. & Mrs. Donald P.	Kwack, Beyoung H.
Clay, Dr. Horace F.	Greathouse, Dennis	Lamoureux, Dr. Charles H.
Clements, Dr. H. F.	Green, Ted	Lane, Irwin E.
Coker, Mrs. Annie Ho	Gressitt, Dr. J. L.	*Lange, Dr. A. H.

M E M B E R S (As of December 3, 1963) (continued from page 136)

- Leeper, Dr. Robert W.
Li, Donald
*Lynn, Robert
Mackay, Dr. Elizabeth
Majumder, Dr. Sanat K.
**Mangelsdorf, Dr. A. J.
Mangelsdorf, Mrs. A. J.
Marks, Mrs. A. Lester
**Martin, J. P.
**McEldowney, George A.
*McGuire, Dr. Donald
McGuire, Thomas
McKeand, Robert J., Jr.
*Menez, Ernani G.
*Meninger, Edwin A.
Middleton, Charles R., III
Miller, Prof. Carey D.
*Miller, Dr. H. A.
Miller, William H.
Miyamoto, Ray I.
Moir, W. W. G.
Moore, Dr. Duane G.
Morton, Dr. Newton E.
Mueller-Dombois, Dr. Dieter
**Munro, George C.
Munro, Hector G.
Murashige, Dr. Toshio
Nakagawa, Yukio
Nakasone, Dr. H. Y.
**Neal, Miss Marie
Neff, Norman Eugene
Newhouse, Jan
Nickell, Dr. Louis G.
*Nigro, Charles D.
Nishibun, Joe
O'Dea, Miss Kathryn
Orr, Miss Kathryn J.
Ozaki, Earl T.
Palmer, Daniel D., M.D.
**Femberton, Dr. C. E.
*Pifer, William R.
**Poole, Prof. Charles F.
Potter, Colin
*McClintock, Dr. Elizabeth
Prasad, P. R. Jagadees
Pratt, John Scot Boyd
*Rainwater, H. Ivan
Richmond, George B.
Rick, Dr. Charles M.
*Roe, Sister Margaret James
*Rollins, Dr. Reed C.
Romanowski, Dr. Roman
Ross, Marshall
Rotar, Dr. Peter P.
*Ruhle, Dr. George C.
*Sachet, Dr. Marie-Helene
Sadaoka, Mrs. Grace K.
Sadoyama, George
**St. John, Dr. Harold
Sakimura, Kanjyo
Sanford, Dr. Wallace G.
Sastrapradja, Didin
Sato, Carl K.
Scheuer, Dr. Paul J.
Seeley, D. A.
*Sheehan, Mrs. Marion
*Sheehan, Dr. Thomas
Shigeura, Gordon
Shinbara, Bernard H.
*Shirakawa, Dr. Harold S.
Shiroma, Edward S.
Sideris, Dr. C. P.
Simms, Carl C.
Smith, Dr. A. C.
*Smith, Dr. Donald H.
Smith, Mrs. Dorothy
Smith, James W.
Smith, Dr. Jimmie Bob
Smith, Dr. Richard F.
*Soegiarto, Aprilany
Souza, Joseph
Spiegelberg, Dr. Carl H.
Spoehr, Dr. Alex
Stanford, Dr. George
*Stephens, Dr. S. G.
*Stone, Dr. Benjamin C.
Suehiro, Miss Amy
Takahashi, David
*Taylor, Dr. T. M. C.
Teho, Fortunato
Terayama, Hajime
*Thorne, Dr. R. F.
Tomich, Dr. P. Quentin
Tong, Nick F.
Tongg, Richard C.
Trowse, Albert C.
Tsuda, Roy T.
Tuthill, Dr. L. D.
Uehara, Sotaro
Urata, R.
Vest, Dr. Dean
Wadsworth, Prof. H. A.
*Wagner, Dr. Warren H., Jr.
Warne, J. Milton
Warner, C. E.
Warner, H. H.
Warner, Dr. John N.
Warner, Dr. Robert M.
Weissich, Paul
**Weller, D. M.
Wells, Clinton H.
Wentworth, Mrs. Juliette O.
Wetzel, Barton F.
Whittier, Henry O.
*Wilbur, Dr. Robert L.
*Wilson, Dr. Kenneth A.
Wishard, Leslie
Wisner, Dr. Chester
Woolford, Howard A.
Wuotila, John L.
Yamaguchi, M.
Yamane, George M.
Yanagihara, Iichi
Yee, Kalfred K.
Yoshida, Richard S.
Young, H. Y.
Young, Lewis R.
Yuen, Q. H.
*Yuncker, Dr. T. G.

*Non-resident members; **Honorary members.

R E C E N T P A C I F I C P U B L I C A T I O N S*

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B O T A N I C A L N O T E S

1964 OFFICERS: The slate of officers presented by the Nominating Committee (Dr. Charles H. Lamoureux (chairman); Miss Beatrice Krauss, and J. Martin) were elected to serve as Society Officers during 1964. They are:

President: Alvin K. Chock, Plant Quarantine Division, Agricultural Research Service, U. S. Department of Agriculture; Herbarium, Bernice P. Bishop Museum; and Department of Botany, University of Hawaii.
Vice-President: Robert Warner, Department of Horticulture, University of Hawaii.
Secretary: Gladys Baker, Department of Botany, University of Hawaii.
Treasurer: William M. Bush, Castle & Cooke, Inc., P. O. Box 2990, Hon. 96802.
Directors: Maxwell S. Doty, Department of Botany, University of Hawaii.
Oscar M. Kirsch, Orchid Grower, 2869 Oahu Avenue, Honolulu 96822.

NEW MEMBERS: The following were elected members at the June meeting:

Mrs. J. D. Babcock, 3228 Oahu Avenue, Honolulu, 96822; Dr. Daniel Palmer, 2003 Leiloke Dr., Honolulu 96822; Joseph Souza, Jr., (State Division of Parks), Waimea; Roy Tsuda, Department of Botany, University of Hawaii.

At the November meeting, Dr. Theodor P. Haas, c/o Islander Hotel, 400 Seaside Ave., Honolulu 96815, was elected a member.

At the December meeting, the following were elected members: Melvin Apo, Amos K. L. Chun, Patrick D. Fox, and George Sadoyama, Plant Quarantine Division, A.R.S., U.S.D.A., P.O.Box 9067, Honolulu 96820; Benjamin K. S. Hu, Plant Quarantine Division, A.R.S., U.S.D.A., P.O.Box 1477, Hilo 96720; George M. Fukumura, Plant Quarantine, P.O.Box 1477, Hilo 96720; Dr. Lucy M. Cranwell (Mrs. Watson Smith), 5045 East Grant Road, Tucson, Arizona; Robert Lynn, National Park Service, 1444 Dept. of Interior Building, Washington, D.C. 20025; Dr. T. M. C. Taylor, Dept. of Biology & Botany, University of British Columbia, Vancouver 8, B.C.; and Dr. Robert F. Thorne, Rancho Santa Ana Botanic Garden, 1500 N. College Avenue, Claremont, California.

ANNUAL BOTANICAL SOCIETY PRIZE: The annual prize to the outstanding University of Hawaii senior majoring in Botany was made to Miss Marilyn Galang (now at Department of Botany, McGill University, Montreal, Quebec, Canada), and Richard Kuramoto (now at Department of Biology & Botany, University of British Columbia, Vancouver, British Columbia, Canada).

NEW CONSTITUTION: The revised Constitution was accepted by the Society at the June meeting, and includes the following amendments:

a) Article II, part c, was changed to read: "To promote the botanical welfare of its members and to develop the spirit of good fellowship and cooperation among them in botanical matters."

b) Article V. The sections in this article were renumbered with Section 1 reading as follows: "The Society year shall run from December 1 to November 30." The section formerly numbered as "1" has been changed to begin "Section". The December meeting...." and continue as distributed.

c) Article VI (By-Laws) has been amended to read in section 3, "The Auditor shall audit the books of the Treasurer and shall report the findings to the Society at the first meeting subsequent to the Annual Meeting."

SECRETARY: Due to the departure of Dr. Toshio Murashige to accept a position at Riverside, California, Miss Beatrice Krauss was elected to fill this office for the rest of 1963.

COMMITTEES: The following have been appointed to the following committees. Others will be appointed at a later date by the president.

Membership Committee: Dr. James L. Brewbaker (chairman), Department of Horticulture, University of Hawaii, Honolulu 96822, and Robert E. Fraker, Plant Quarantine Division, A.R.S., U.S.D.A., P.O.Box 9067, Honolulu 96820.

Members are invited to submit nominees for Society membership. These names, under the provisions of the new constitution, may be presented at a regular meeting by any member of the Membership Committee.

Publicity Representative: Amos K. L. Chun, Plant Quarantine Division, A.R.S., U.S.D.A., P.O.Box 9067, Honolulu 96820.

Newsletter Committee: Dr. George W. Gillett (Newsletter Editor and committee chairman), Department of Botany, University of Hawaii, Honolulu 96822; William M. Bush*, Castle & Cooke, Inc., P.O.Box 2990, Honolulu 96802; Dr. Donald P. Gowing*, Pineapple Research Institute, Honolulu 96822; and Dr. Wallace Sanford (Newsletter Managing Editor), Pineapple Research Institute. (*1963 committee member).

VISITORS: Dr. F. R. Fosberg, Chairman of the Standing Committee on Botany, Pacific Science Association, visited the Herbarium, B. P. Bishop Museum, and the Department of Botany, University of Hawaii. He was enroute to the UNESCO Advisory Committee for Humid Tropics in Jakarta. While in Hawaii he also made a research visit to Hawaii Volcanoes National Park. (AKC)

Maurice Jay of Taharaa, Tahiti visited the Museum and the University on a brief one day visit in search of information about the sedge, Oreobolus. He has obtained materials of this genus from the top of Orohena and wanted to compare it with O. furcatus such as grows in Alakai Swamp. Jay and his son, Henri, just completed a tour of North America. They were accompanied with his numerous purchases of books and other things to enable him to extend his avocational interests in botany. These interests include diatoms, mosses, liverworts, and lichens, although his interests are also strong in the ferns and flowering plants. (MSD)

H.B.G.F. ANNUAL MEETING: The annual business meeting of the Hawaiian Botanical Gardens Foundation, Inc. will be held on Tuesday, January 21, at 10:00 a.m. The tentative program is for President W. W. G. Moir to discuss his visit to the World Orchid Conference, where he presented a paper on the "Intergeneric Hybrids in the Oncidinae". (CEH)

U N I V E R S I T Y O F H A W A I I

PLANT SCIENCE BUILDING PROJECT: The University has included in its budget request to the State Legislature the sum of \$208,000 for planning of the Plant Science Building. This item has the fourth priority on the list of major projects. The budget report has already been prepared and includes the costs of construction, furniture, and equipment (no scientific instrumentation is included). The building will house teaching and research facilities for five departments (Botany, General Science, Horticulture, Pathology, and Physiology) and include support facilities. (AKC)

FIELD TRIP: Roy Tsuda, Graduate Assistant in Botany, spent two weeks collecting algae and flowering plants on Laysan Island, Leeward Hawaiian Islands. He continued the observations made on the terrestrial vegetation which were begun in 1961 by Charles H. Lamoureux, Department of Botany Chairman. (HOW)

VISITING INVESTIGATOR: Dr. Robert Lichtwardt, Associate Professor of Botany, University of Kansas, will be at the University for three months. He is on sabbatical leave and is conducting research in mycology. His next research destination is Japan. (HOW)

OCEANOGRAPHIC DEPARTMENT: A recommendation will be made to form a separate Department of Oceanography at the graduate level. The oceanography courses now in other departments would be transferred to this department, as well as part of the time of the faculty involved in the teaching of these courses. A corps of full-time faculty will be selected from those now on campus (as Dr. William Clayton, Dr. Taivo Laevastu, Dr. Theodor Chamberlain, Prof. Vernon Brock (Director, Hawaii Marine Laboratory), Prof. Carl Adams, Dr. Doak Cox, Dr. Maxwell S. Doty, and Prof. Toshitsugu Sakou) or appointed from off-campus. The department might well be one that stressed biology and the sea as a biological environment rather than the conventional physical oceanography

department. If the recommendation is accepted, the department will be represented by the physical, chemical, geological, and biological fields. It was recognized that there are other oceanographic disciplines such as marine meteorology, engineering, and geo-physical. (MSD)

H A W A I I A N B O T A N I C A L S O C I E T Y M E E T I N G

DATE: January 6, 1964, 7:30 p.m.

PLACE: Agee Hall, Experiment Station of the Hawaiian Sugar Planters' Association, 1527 Keeaumoku Street, Honolulu.

SUBJECT: "Botanizing in Java and Borneo"

SPEAKER: Dr. George W. Gillett, Associate Professor of Botany, University of Hawaii. The speaker was formerly at Michigan State University, and spent last year at Turku University in Finland. While enroute to Hawaii he visited Java and Borneo. He has been appointed to serve as the 1964 Editor of the Newsletter.

MEETINGS: Members are reminded that the regular meetings of the Society are held on the first Monday of each month (e.g., February 3, March 2, April 6, May 4, June 1, October 5, November 2, and December 7, 1964).

N E W S L E T T E R P O L I C Y

The Newsletter Committee, consisting of Alvin K. Chock (chairman), W. M. Bush, and D. P. Gowing met on October 30. Their recommendations were adopted by the Society at the November 4 meeting.

The Newsletter will be continued with the same title, masthead, and general format, with five issues (instead of nine). It will be prepared for early October, mid-December, February, April, and June. The deadlines for news stories will be on September 10, December 1, February 1, April 1, and June 1. Feature articles submitted should be received by the Editor at least 15 days prior to the news stories deadline.

The size of the Newsletter issues will be five to seven sheets (10-14 pages), of which the feature article should usually be not more than six pages. The scope of the publication shall be Hawaii and the Pacific, with preference given to Hawaii. For the present, mimeographing will continue to be the printing media. The December issue will contain the annual reports and a list of members. The names and addresses of new members, when elected, will be listed in each issue. When known, announcements for forthcoming meetings (held on the first Monday of each month except July, August, and September) will be included. When this is not covered in the Newsletter, the Secretary will send out post card announcements.

The Newsletter will continue to be financed from the current regular income (dues and savings interest) of the Society. Discussion on subscriptions, back issue orders, reprints, contributions, and patronage is pending until steps taken to declare the Society a non-profit educational organization have been completed. Continuation of publication would depend upon continued donated services if no other method of financing was developed.

The free distribution list was reviewed and individuals thereon will be sent an invitation to join the Society. Non-member names will be dropped otherwise (effective with the February issue). The list of institutions should be reviewed, but most seem appropriate.

The Editor will be formally appointed annually by the President, and details of the Newsletter operation left to the Editor. The Managing Editor's position is also an annual appointive position, rotated among the cooperating institutions. (DPG & AKC)

E D I T O R ' S N O T E

This is the last issue which the present Editor will edit and compile. Beginning with the February 1964 (Vol. 3, No. 1) issue, it will be under the editorship of Dr. George W. Gillett, Associate Professor of Botany, University of Hawaii. I hope that you will give him as much cooperation as you have given me. I also hope that the Society will be able to adopt in the near future, should other methods of financing be developed, the publication of the Newsletter in a more permanent format, such as off-set printing.

In retrospect, the concept of the Newsletter was born almost two years ago, and the first issue of two pages appeared in February 1962. It has gradually increased in size, with the present masthead and format adopted in January 1963. Originally, the Editor was not only responsible for editing the news, but also for writing all of the news stories, as well as typing, mimeographing, collating, and distributing the issues. During their tenure as Society President, Dr. Charles H. Lamoureux (1962) and Dr. Maxwell S. Doty (1963) were very instrumental in the distribution of these tasks to other Society members. (AKC)

D U E S N O T I C E

Dues for 1964 should be remitted to the Treasurer (W. M. Bush, Castle & Cooke, Inc., P. O. Box 2990, Honolulu 96802). The annual dues of two dollars (\$2.00) are payable on or before the first meeting of the year (January 6, 1964). Your cooperation in sending this sum to the Treasurer as soon as possible will reduce the expenditures and time needed to send dues notices.



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H A W A I I A N B O T A N I C A L S O C I E T Y
c/o Department of Botany, University of Hawaii, Honolulu 14, Hawaii

O F F I C E R S

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(Dept. Botany, Univ. Hawaii)
VICE-PRESIDENT-----Oscar Kirsch
(Orchid Grower; 2869 Oahu Ave., Honolulu 14)
SECRETARY-----

TREASURER-----William M. Bush
(Castle & Cooke, Inc., P.O. 2990, Hon. 2)

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Charles H. Lamoureux (Dept. Botany, U. H.)
Alvin K. Chock (POD, ARS, USDA; B.P. Bishop
Museum; Dept. Botany, U. H.)

MEMBERSHIP COMMITTEE:

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1527 Keeaumoku St., Hon. 14, Hawaii)
Kalfred Yee (Garden City, Inc.)
James L. Brewbaker (Dept. Hort., U. H.)

The HAWAIIAN BOTANICAL SOCIETY was founded
in 1924 to "advance the science of Botany
in all its applications, encourage re-
search in Botany in all its phases," and
"promote the welfare of its members and
to develop the spirit of good fellowship
and cooperation among them." "Any person
interested in the plant life of the
Hawaiian Islands is eligible for member-
ship in this Society."

E D I T O R I A L S T A F F

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ASSISTANT EDITOR-----Henry O. Whittier
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MANAGING EDITOR-----Wallace G. Sanford
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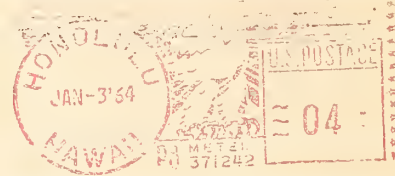
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The Hawaiian Botanical Society Newsletter
is published monthly, except during the
summer months of July, August, and Sept-
ember. It is distributed to all Society
members and other interested individuals
and institutions, with the purpose of
informing them about botanical news and
progress in Hawaii and the Pacific. News
contributions and articles are welcomed.
The deadline for submission of news items
is the 20th of each month prior to publi-
cation.

Duplicated at the Pineapple Research
Institute of Hawaii.

Membership Dues are \$2.00 per calender
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